

## CLAIMS:

1. A polarizing mirror (1) for viewing purposes having a first plane (2) reflecting light of a first kind of polarization (20') to a viewing side, the mirror passing light of a second kind of polarization (20'') and being provided with a display device (5) at its non-viewing side, which display device during use provides light of the second kind of polarization, at least one retardation layer (31,32) being provided between the display device and the polarizing mirror.
2. A polarizing mirror as claimed in claim 1, the orientation direction of a retardation layer (31,32) being at substantially 22.5 degrees or 45 degrees with respect to the polarization direction of the polarizing mirror.
3. A polarizing mirror as claimed in claim 1, at least two retardation layers (31,32) being provided between the display device and the polarizing mirror.
4. A polarizing mirror as claimed in claim 3, the absorbing polarizing layer and the polarizing mirror at its non-viewing side both comprising a retarder layer (35, 36), which rotates the polarization over substantially 45 degrees.
5. A polarizing mirror as claimed in claim 4, the orientation direction of the retardation layer (31,32) being at substantially 45 degrees with respect to the polarization direction of the polarizing mirror.
6. A polarizing mirror as claimed in claim 2, the retarder layer comprising a  $\frac{1}{4} \lambda$  foil.
7. A polarizing mirror as claimed in claim 3, having two retardation layer (31,32) between the display device and the polarizing mirror which each rotate the polarization over substantially 90 degrees.

8. A polarizing mirror as claimed in claim 3, having the orientation directions of a first and a second retardation layer along  $\frac{1}{4} \alpha$  and  $\frac{3}{4} \alpha$  in which  $\alpha$  is the angle between the polarization directions of the polarizing mirror and the display device
- 5 9. A polarizing mirror as claimed in claim 2, having the orientation direction of a retardation layer along the bisector of the polarization directions of the polarizing mirror and the display device.
10. A polarizing mirror as claimed in claim 7, 8 or 9 the retardation layer
- 10 comprising at least one  $\frac{1}{2} \lambda$  foil.
11. A polarizing mirror as claimed in claim 1 or 3, at least one of the retarder layers being broad band retarders .